

## ISSUE 2.1: 911 LINKAGE

### A. Issue Definition

This issue relates to how 511 services should provide linkage to 911 services.

### B. Recommended Guideline

For a number of legal and technical reasons, 511 should not be directly linked to 911. If a system chooses to inform callers that they have not dialed 911, the message should be a brief, "if this is an emergency, please hang up and dial 911."

### C. Discussion

#### a. Issue

For over 30 years, 911 has been used for reporting emergencies or requesting emergency assistance. About 97% of the U.S. population has access to 911 service, with roughly 150 million calls made during 2000. Nearly one-third of those calls were from wireless phones.

The proliferation of N11 numbers could increase the probability that people placing calls to 911 for emergency assistance will accidentally dial a different N11 number. For example, a person needing to report an automobile accident may accidentally dial 511, the number proposed for traffic information. Also, callers requiring emergency assistance may not be in the physical or mental condition to think clearly enough to hang up the phone and redial if they misdialled when seeking 911.

Further, as a three-digit number providing traveler information, it is possible that 511 could be misconstrued as an alternative to 911 for traveler-related emergency assistance. While this is clearly not the vision the Coalition has for 511, what matters is the perception of the calling public.

Thus, the issue is the relationship between 511 and 911, and what steps, if any, 511 system implementers should take to distinguish 511 from 911 and/or link 511 to 911.

There are several complicating factors to this issue, including:

- Call routing – local 911 services are often a patchwork of systems. Some are based on each county having a center, while others handled by a single regional center (centers answering a 911 call are termed public safety answering points, PSAPs). In some cases, wireless calls are routed to different PSAPs than wireline calls. A system has emerged to properly route 911 calls to the appropriate PSAP, but this system is not trivial or

free. 511 service areas will likely overlap multiple 911 PSAPs. If linkage were to occur, similar methods would be needed to determine caller location in order to forward calls to the correct PSAP.

- Location determination – “Enhanced 911” (E-911) provides the location of the caller to the PSAP in order to expedite emergency assistance. E-911 already exists for landline calls, with the telecommunications carrier providing the address of the caller to the PSAP. Wireless E-911, for which determining the caller’s location is more complex, will be introduced over the next few years. Wireless carriers will provide the latitude and longitude of the caller’s location to the PSAP. If 511 systems were to forward calls to 911 PSAPs, location information for callers would be needed so that it could be passed upon as well.

#### b. Options considered

From a national perspective, realistic options on how to address this issue include:

- Being Silent – leaving the decision on how to link to 911 with 511 implementers
- Encouraging call forwarding to 911
- Requiring call forwarding to 911
- Discouraging call forwarding to 911
- Prohibiting call forwarding to 911

#### c. Conclusions

First, the Coalition believes that national consistency on this issue is important. As callers use different 511 systems, dealing with this potentially life and death issue in an inconsistent manner is not desirable. Consequently, the community of implementers needs to establish and implement a consistent approach.

At present, the Coalition advises against integrating capabilities into 511 systems that will allow call forwarding to PSAPs. While at some point in the future the Coalition may change this guideline, the reasons for discouraging call forwarding at this time are many:

- *Requirements for location determination of callers* – To provide enhanced 911 capabilities, caller location must be ascertained and communicated to 911 systems. While technically possible, this requirement places a costly burden on 511 implementers. Even more troubling, it is likely that laws will prohibit telecommunications carriers from sharing caller location information with 511 services that are operated by third parties – what any 511 system that is not directly by a carrier would be considered. Thus, 511 systems may not legally be able to obtain location information even if

desired. In summary, it is doubtful at present that caller location can be obtained and then passed on to 911 PSAPs.

- *Call routing complexity* – Without location information of the caller, it is impossible to route a call to the correct 911 PSAP. Even with caller location information, call routing is complex. A likely approach would be for 511 services to subscribe to the same call routing databases presently used in 911 systems. Costs would be incurred for these services.
- *Potential for increased confusion between 511 and 911 services* – If the goal is to clearly differentiate 511 from 911, providing the ability to forward calls from 511 to 911 seems counter to achieving this goal.
- *No other 3-digit service has a requirement for call forwarding to 911.*

The Coalition's recommended near-term approach is to include in the initial greeting, "if this is an emergency, please hang up and dial 911." This phrase, commonly used by telephone systems when the potential for confusion occurs, enables callers to dial 911 directly, thus enabling the system specifically designed for this purpose to determine the caller's location and properly route the call to the correct 911 PSAP.

Of course, the Coalition is sensitive to the desires of public safety advocates and shares their desire to ensure that all calls intended for 911 reach their destination. Therefore, the Coalition will continue to work with the public safety community to determine whether better solutions exist than the current guideline, particularly as call routing and location determination advancements occur. The Coalition will also work with 511 implementers to determine, by experience, the extent to which 511 and 911 are confused, thereby allowing for a better assessment of the magnitude of the problem.

## ISSUE 2.2: TIMESTAMPING OF INFORMATION

### A. Issue Definition

This issue refers to the providing time/date identifier to provide callers with sense of reliability and accuracy of the information provided.

### B. Recommended Guideline

Caller expectations are for timely information. If a 511 system provides basic content quality as defined in the content guidelines, then timestamping the information is unnecessary and undesirable. If a system knowingly provides information that is updated not as conditions change, but based upon a periodic schedule, then the schedule should be communicated to callers in association with the particular message.

### C. Discussion

#### a. Issue

Some automated telephone systems in operation today will indicate in the recorded message when the information was created, enabling the caller to determine how old the report is. This timestamping is done in many different ways, some of which could lead a caller to believe information is more up-to-date than it actually is. Some systems provide a timestamp for all information available based upon when the last update of any item occurred. Other systems timestamp each specific recorded message (e.g. a particular route). Still many other systems do not use timestamping at all.

Within a region, 511 is likely to deliver information originating from numerous agencies, so the quality of information from one agency could influence the customer's perception and satisfaction with the overall 511 service.

Timestamping, if omitted or improperly used could be misleading and lead a caller to believe information is more current than it actually is. Eventually, the credibility of the information is lost and reduction in 511 usage is likely to result.

Timestamping could become an opportunity for criticism if the report is not updated in a timely fashion, but it can be a valuable quality control measure for operators and administrators to monitor the processes that collect and fuse the information to be disseminated.

Timestamping each information area could be conflicting, redundant and lead to unnecessarily longer time online, which is a concern for online usage while driving and potentially higher operating costs.

Conversely, a single timestamp reference for the call, such as "...this 511 report as of (time, date)..." may not be reflective of the information being provided by a variety of agencies and sources.

In Boston, site of one of the nation's longest running and most successful telephone traveler information systems, with over 4.5 million callers annually, how the timestamp issue has been addressed provides an interesting experience. Initially, an automatic time stamp was added at the beginning of each call ("information current through 8:02 a.m...."). The philosophy was that there were human operators continually reviewing information on the various route segments and transit systems and that although the information may have been entered as long as twenty minutes ago, no change in status has necessitated an actual update of the message. In focus groups with users, users told the system operators that they sensed the timestamp was automatically inserted and was not a true indication of when the information was entered. In the end, the timestamp was removed as users feel that anything provided on the system is timely.

#### b. Options considered

There are three logical options for national consistency regarding timestamping of information:

1. Be silent – leave time stamp decisions to implementers, who will be better able to judge their user base and match their approach to the quality of information.
2. Discourage timestamping – acknowledge that users expect information to be current and that a timestamp is not necessary.
3. Require timestamping – acknowledge that callers have a right to know the timeliness of information they are being provided.

#### c. Conclusions

In general, timestamping should not be used in information provided to callers. Public and private sector research has concluded that a basic consumer expectation for telephone-based traveler information systems is that the information provided is timely. However, if a message is scheduled to be updated periodically, then such information such as update frequency should be included in the message ("this information is updated every hour on the hour...")

The team recognizes that this approach places pressure on 511 system operators to provide timely information. However, it is the team's assessment that callers are going to have this level of expectation and the nation's 511 system should strive to meet this level of service. If it cannot be attained by a certain element of a particular system, then periodic updates of information should be scheduled and that schedule should be adhered to and be communicated to callers.

It is useful however to have the raw data that is collected and supports the service to contain information associated with when the data was collected and, if possible, when it is no longer expected to be relevant. This will aid in the telephone system, whether automated or human-based in determining how to use and represent the data – and how to deal with it when it expires.

## ISSUE 3.1: SYSTEM ACCESS QUALITY

### A. Issue Definition

This issue refers to the ability of the telephone system to reliably and quickly answer calls.

### B. Recommended Guideline

511 systems should be sized to accept all calls for the 90th percentile peak hour load. If live operators are utilized or connected to as part of a 511 service, 90th percentile wait time should not exceed two minutes, and callers should receive indications that they are on hold. 511 services should have an availability to callers of 99.8% (out of service less than 18 hours a year). System performance against these parameters should be measured and monitored.

### C. Discussion

#### a. Issue

Existing state road condition reporting, metropolitan-area traveler information and transit customer service center systems provide useful insights into the issues related to the quality of telephone system access.

Existing systems vary widely in their access quality. Some systems are designed for peak period usage, reducing or eliminating busy signals. Other systems are designed for average usage and become overloaded during high demand periods. Consequently, some systems enable users to quickly obtain information, while others take much longer.

Callers wishing to transfer to live operators for assistance, which will be common in transit-related portions of 511, often incur significant wait times. In fact, many callers abandon their calls while still on hold, leading to caller frustration and costing the system in terms of communications costs and capacity.

System access quality is an important part of overall caller experience. There are many ways of assessing access quality, including:

- Call volume
- Average call time
- Average navigation/wait time (until reaching desired information or a live operator, e.g., transit call center or highway construction resident engineer)
- Peak hour port usage
- Consumer complaints, kudos and suggestions
- Mean time between systems failures

b. Options considered

The Coalition has considered the following approaches for addressing system access quality at the national level:

- Be silent – leave decisions on access quality up to local implementers and accept that wide variance of access quality will likely exist, as it does in current systems. Competition between private sector suppliers and even between implementers could naturally lead to good access quality.
- Specify access quality design metrics and set specific targets against these metrics.
- Establish targeted minimum performance standards – focus on a few key metrics that embody the main elements of access quality, metrics that are performance, not technology, oriented.

c. Conclusions

As the performance of one 511 system will reflect on other operating systems, the Coalition has determined that access quality is a national issue. As more systems emerge, until near nationwide coverage exists, consistent access quality will become increasingly important. Users will expect it, and the FCC is expecting the transportation industry to wisely use this “scarce resource.”

The Coalition believes that access quality can be characterized by three primary factors:

- Will a caller get a busy signal when calling?
- Once on the system, how long will a caller have to wait for information once requested, whether this is retrieving an automated report or holding for a live operator?
- How often will the phone system be “out of service” such that no caller can get access?

For these factors, the following metrics and performance levels have been established as the recommended guidelines, based upon implementation experience:

- *Busy signals* – Implementers should monitor hourly call volumes and design system capacity such that during 90% of all hours, sufficient incoming lines are available to handle all calls. While implementers can of course design their systems to meet 100% of their capacity needs, the Coalition has determined that the 90<sup>th</sup> percentile is a significant improvement from systems currently designed to handle average, or roughly 50<sup>th</sup> percentile hourly call volumes. Oftentimes, spikes in usage are caused by weather or catastrophic events that result in such high



volumes that significant excess capacity would be required to handle all of these calls, capacity that would sit idle a large proportion of the time.

- *Wait times* – Much as with busy signals, wait times should be measured. Wait times are most likely to be an issue when a caller is connected to or transferred to a live operator. Based on an informal survey of transit operators, most systems average wait time is currently 60 seconds or less. Consequently, the Coalition has determined that targeting wait times of 90 seconds or less during 90% of the time represents an achievable goal and will prove acceptable to most callers. To minimize caller aggravation, it is suggested that callers on hold be periodically reminded what they are on hold for, so that it is apparent to the caller that they are waiting for an operator or information.
- *511 system reliability* – Callers must have faith that 511 will be there when it is needed. Consequently, the most relevant metric to assess the performance reliability of the 511 service, independent of the number of lines or the quality of the information provided by the service, is system availability. Simply put, availability is defined as the percentage of time the system is operational over an extended period, usually a year. The Coalition suggests that system availability should meet or exceed 99.8%, meaning “the system is down” no more than 18 hours a year. This performance level is achievable with current telephone systems, provided they are properly designed, installed and maintained.

The Coalition recommends that these metrics be measured and monitored by system implementers. The Coalition will request periodic feedback from implementers on performance against these parameters. This data will be used to assess whether modifications to the access quality parameters are required.

## ISSUE 3.2: HOURS OF SYSTEM OPERATION

### A. Issue Definition

This issue addresses the days and hours in which 511 services should be available to callers.

### B. Recommended Guideline

511 systems should be available 24 hours a day, 7 days a week. However, it is recognized that systems will not always be “operated” 24/7. In instances where the system is providing static, pre-recorded messages, it should inform the caller that it is outside normal operating hours.

### C. Discussion

#### a. Issue

Hours of operation for existing phone services vary widely. Many, but not all, automated systems are available 24 hours a day, 7 days a week. However, information may only be updated during a more limited set of hours, hours that vary from system to system. Many transit information centers operate extended business day hours. If this inconsistency continues when these systems – and new ones – are available through 511, the potential for significant caller confusion and frustration exists.

Users need traveler information 24 hours per day, seven days a week. For instance, one never knows when weather will strike. However, many locations in the country will not have the resources to make “live” updates 24/7.

How to address hours of operation in a fashion that provides consistent treatment for callers, while reflecting technical and financial realism on the information delivery side is the issue addressed by this guideline.

#### b. Options considered

The Coalition has considered three options for addressing this issue:

- *Be silent* – leave implementers to set hours of operation, both of the phone service itself as well as the hours during which continuously updated reports or, where applicable, live operators are available. This option would seem to be the best to pursue if inconsistency in hours of operation– or how to address this inconsistency – would not pose a major problem for callers.
- *Establish guideline for “live” system operation times* – This approach would specify the hours during which a 511 system should be providing

content at top quality (just as a business has hours during which a receptionist is available to answer calls, while after hours calls receive an automated message). Consistency would be established by not deviating – shorter or longer – from these operating times. (Again, it is possible for 511 services to be accessible, but be in “recorded mode,” providing information that was available when the operators went home or providing long-term information such as construction reports.)

- *Consistently define how systems handle “live” and “recorded” modes, leaving the determination of operating hours to implementers* – Attack consistency not in the hours of operation, but by defining and communicating whether a system is “live” or not to the caller.

### c. Conclusions

The Coalition has determined that hours of system operation is a consistency issue and that leaving implementers without guidance in this area creates the potential for caller confusion and diminishing the overall image of 511 services.

However, the Coalition does not support setting hard and fast hours of “live” operation for each 511 system. This approach would not take into account local conditions and/or resources. Of course, the Coalition desires to see live operation 24/7 for all systems, but this desire is balanced with the need to provide flexibility in determining the appropriate hours of live operation with implementers who are better able to judge the needs of their region and the resources they have available for system operation. Instituting a single set of operating hours would risk needlessly constraining some implementations, by having a lowest common denominator solution where too few hours have been specified, or set the bar too high by establishing lengthy hours of operation that drive the price of providing service too high for some regions.

The Coalition believes that implementers should have flexibility to set operating hours for inserting information into the 511 system, whether automated or recorded messages, or live operators. But it is incumbent upon the systems to communicate to callers when they are receiving information outside of regular operating hours.

Finally, the Coalition does expect that all 511 systems will answer calls 24/7. Again, much like businesses, the number never goes off, just into the information equivalent of fully-automated mode.

d. Additional Information

The following table illustrates the range of operating hours in use today. This list is not exhaustive.

System	Type of Information	Hours of Operation*
California	road/weather/construction	24/7
Florida DOT(2)	construction	24/7
Arizona	road/weather/construction	24/7
Chicago	weather/construction	24/7
Nevada	weather/construction	24/7
Houston	Transit sched. + delay info.	24/7 auto + 6-9 (wd) and 8-8 (we) operator
Lexington, KY	Transit sched.	6-10 (wd) and 10-6 (we) operator
Denver	Transit sched. + AVL	6-8 (wd) and 8-8 (we) operator
Minneapolis	Transit sched.	24/7 auto + 6:30-9 (wd) and 7-4:40 (we) operator
Topeka	Transit sched. + delay info.	6-6 operator
Branson, MO	traffic/multi-modal	24/7
Travinfo (CA)	traffic/multi-modal	24/7
Chicago	traffic/multi-modal	24/7
Rhode Island	traffic/multi-modal	6-10 (wd) operator
Cincinnati/No. KY	traffic/multi-modal	24/7 - static and 6-7 (wd) updated messages

\* wd = weekday; we = weekend; (note that all operator times (e.g. 8-8) refer to AM and PM respectively)

### ISSUE 3.3: ADA IMPLEMENTATION

#### A. Issue Definition

This issue refers to 511 services complying with the Americans with Disabilities Act (ADA).

#### B. Recommended Guideline

511 implementers need to consider that under Section 255 of the Telecommunications Act of 1996, carriers and equipment manufacturers must provide access to and make their services and products usable by individuals with disabilities, “if readily achievable.” Title II of the Americans with Disabilities Act prohibits public entities (states, local governments, and any department, agency, or other instrumentality of state or local government) from discriminating against those with disabilities in all services that they provide to the public. 511 implementers should include in their design plans how they intend to provide access to these services to the disabled community, such as through the carriers’ existing TRS or TDD capabilities.

#### C. Discussion

##### a. Issue

511 providers, as public entities, must comply with the Americans with Disabilities Act. Specifically regarding how public entities communicate with the public, the ADA requires that: “A public entity shall furnish appropriate auxiliary aids and services where necessary to afford an individual with a disability an equal opportunity to participate in, and enjoy the benefits of, a service, program or activity conducted by a public entity.”

The rules provide that where a public entity communicates by telephone with program applicants and beneficiaries, that telecommunications devices for the deaf (TDD), or other similar technologies, be utilized to communicate with those having hearing or speech disabilities. For example, telecommunications relay services (TRS), such as those accessible through the “711” abbreviated code, may be employed where a TDD device is not available. Further, according to the implementing rules, public entities that have extensive telephone contact with the public should make available telecommunications devices for the deaf or similar capabilities. The rules do note, however, that TDD capabilities may not be suitable for all types of telephone services, such as phone-tree menus where the caller responds to prompts by pushing a button on a touch tone phone or voicing a particular selection.

However, there is no concomitant requirement that federal agencies retrofit existing technologies or systems to provide access for individuals with disabilities. Similarly, as noted above, one set of implementing rules for Section

255 of the Telecommunications Act of 1996 explicitly exempts existing telecommunications equipment from accessibility requirements except where they have undergone a “substantial change or upgrade.”

Those implementing the 511 code should include in their design plans how they intend to provide access to these services to the disabled community, such as through the carriers’ existing TRS or TDD capabilities. A failure to provide this access could be judged as violative of the ADA’s non-discrimination rules.

Individuals who believe they have been discriminated against on the basis of a disability may seek remedies against a public entity pursuant to the Civil Rights Act of 1964. States and their constituent parts are not immune from a lawsuit in federal or state court for an alleged violation of the ADA.

**b. Options considered**

511 implementers may choose to comply with the ADA by offering TRS or TDD capabilities through the carriers or via their own equipment.

**c. Conclusions**

ADA compliance is not an option. The Working Group strongly supports that 511 implementers examine the carriers’ existing TRS or TDD capabilities.

**d. Additional Information**

Attached is an extract from the ITS America white paper on Telecommunications Law’s on the ADA’s impact on 511.

### **E. Access By Those With Disabilities**

Telecommunications carriers (*i.e.*, common carriers) and telephone equipment manufacturers are obligated to ensure that their services and products are available to the disabled community, particularly those with speech or hearing disabilities. First, under Section 255 of the Telecommunications Act of 1996, carriers and equipment manufacturers must provide access to and make their services and products usable by individuals with disabilities, “if readily achievable.”<sup>1</sup> Pursuant to this Congressional mandate, the Commission has established minimum standards for carriers and equipment manufacturers to ensure accessibility.<sup>2</sup> While it does not appear that existing equipment must be retrofitted to comply, one set of implementing rules requires that new or current equipment, which has undergone a substantial upgrade or change, must be made accessible for disabled callers.<sup>3</sup>

Second, and more specifically, Title IV of the Americans with Disabilities Act (“ADA”) mandates that interstate and intrastate telecommunications relay services (“TRS”)<sup>4</sup> be made available to those with hearing and speech disabilities.<sup>5</sup> The carriers’ provisioning of TRS requires that they be able to handle any type of call normally provided by common carriers. Carriers have the burden of providing the infeasibility of handling a particular type of call.

There is an additional, broader provision in the ADA that reaches beyond only telecommunications carriers. Title II of the Act prohibits public entities (states, local governments, and any department, agency, or other instrumentality of state or local government) from discriminating against those with disabilities in all services that they

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<sup>1</sup> 47 U.S.C. §§ 255(b), (c).

<sup>2</sup> See *In the Matter of Sections 255 and 251(a)(2) of the Communications Act of 1934, as Enacted by the Telecommunications Act of 1996: Access to Telecommunications Service, Telecommunications Equipment and Customer Premises Equipment by Persons with Disabilities*, CC Docket 96-198, Report and Order and Further Notice of Inquiry, FCC 99-181 (rel. Sept. 29, 1999). The relevant FCC accessibility guidelines are found at 47 C.F.R. Part 6. (As noted above, the reach of Section 255 extends only to telecommunications service providers and equipment manufacturers. However, the Commission did use its ancillary jurisdiction to find that “information service providers” which utilize voice mail and interactive menus in order to provide a telecommunications service or system to a customer must provide such services through TRS or other technologies. See *id.* at Part 7 (setting forth the Commission’s accessibility rules for voice mail and interactive menus for persons with disabilities).)

<sup>3</sup> See 36 C.F.R. § 1193.2. (36 C.F.R. Part 1193, enacted by the federal Architectural and Transportation Barriers Compliance Board, which was created to oversee the federal government’s compliance with ADA, before the FCC’s rulemaking, sets forth additional telecommunications service and equipment access requirements, and which were to be issued in conjunction with the Commission. See 47 U.S.C. 255(e).)

<sup>4</sup> TRS enables those with hearing or speech disabilities to communicate by telephone with persons who may or may not also have these disabilities through deploying special technologies and trained personnel who relay conversations between persons using either text or voice telecommunications services. Telecommunications Devices for the Deaf (“TDD”), which is a machine that utilizes graphic communication in the transmission of code signals, is considered a type of TRS application.

<sup>5</sup> Pub. L. No. 101-336. Title IV is codified at 47 U.S.C. § 225. The relevant implementing regulations are found at 47 C.F.R. Part 6. Again, the reach of Section 225 extends only to telecommunications service providers and equipment manufacturers.

provide to the public.<sup>6</sup> (There are also similar non-discrimination protections specifically applicable to services provided by public transportation agencies.<sup>7</sup>) Subtitle A of Title II of the ADA, which applies to all services, programs and activities provided by public entities, declares that no individual with a disability can be denied a public benefit or discriminated against on the basis of that disability.<sup>8</sup> Implementing regulations cover employment opportunities, program and facilities accessibility, and communications.<sup>9</sup> Specifically regarding how public entities communicate with the public, the ADA requires that:

A public entity shall furnish appropriate auxiliary aids and services where necessary to afford an individual with a disability an equal opportunity to participate in, and enjoy the benefits of, a service, program or activity conducted by a public entity.<sup>10</sup>

Furthermore, the rules provide that where a public entity communicates by telephone with program applicants and beneficiaries, that telecommunications devices for the deaf ("TDD"), or other similar technologies, be utilized to communicate with those having hearing or speech disabilities.<sup>11</sup> For example, telecommunications relay services, such as those accessible through the "711" abbreviated code, may be employed where a TDD device is not available.<sup>12</sup> Further, according to the implementing rules, public entities that have extensive telephone contact with the public should make available telecommunications devices for the deaf or similar capabilities.<sup>13</sup>

The aids, benefits and services offered to disabled individuals must be effectively equal to those provided to others who are not disabled. Even if a program for disabled individuals is available, there is no requirement that someone with a disability must subscribe to it and not otherwise be permitted to participate in the program not designed for the disabled. Specifically for communications services provided by public entities, a

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<sup>6</sup> 42 U.S.C. §§ 12131-61. The source for these provisions of the ADA is Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. § 794), which prohibits discrimination on the basis of a disability in programs and activities conducted by Federal agencies or that receive federal financial assistance. ADA extended Section 504's protections to state and local governments, regardless of whether they received any form of federal funding. Title III of the ADA also prohibits discrimination on the basis of a disability in public accommodations and services operated by private entities. 42 U.S.C. § 12182.

<sup>7</sup> See 42 U.S.C. §§ 12141-50.

<sup>8</sup> *Id.* at § 12132.

<sup>9</sup> See generally 28 C.F.R. Part 35.

<sup>10</sup> *Id.* § 35.160(b)(1).

<sup>11</sup> *Id.* at § 35.161.

<sup>12</sup> *Id.* at Part 35, Appendix A.

<sup>13</sup> *Id.* The rules do note, however, that TDD capabilities may not be suitable for all types of telephone services, such as phone-tree menus where the caller responds to prompts by pushing a button on a touch tone phone or voicing a particular selection. *Id.*



disabled individual must be afforded the opportunity to choose the types of aids or services they prefer. However, the obligations of public entities to accommodate individuals with disabilities are not without limits. Program accessibility requirements are limited to those actions that will not result in undue financial and administrative burdens on the public entity or result in fundamental alterations in the nature of the service, etc.<sup>14</sup> There is no bright line test for determining whether a specific accommodation must be utilized or if the failure to do so would result in impermissible discrimination against a disabled person. Each analysis is fact specific.

Individuals who believe they have been discriminated against on the basis of a disability may seek remedies against a public entity pursuant to the Civil Rights Act of 1964.<sup>15</sup> States and their constituent parts are not immune from a lawsuit in federal or state court for an alleged violation of the ADA. Similarly, all funding, including direct grants, guarantees, loans, insurance, etc., provided by the US Department of Transportation is subject to both the protections and requirements of the Civil Rights Act of 1964, which prohibits discrimination against individuals on the basis of race, color, or national origin, and, under the ADA, on the basis of a disability.<sup>16</sup>

A question has come up regarding whether the ADA, or other similar provisions, would require public entities to retrofit their existing traveler information services to accommodate TRD, TDD or other capabilities. There does not appear to be a definitive answer. In fact, there is some conflicting evidence that suggests possible opposite conclusions. For example, Section 508 of the Rehabilitation Act, the predecessor to the ADA for the federal government, specifies that federal agencies must ensure that their employees and members of the public with disabilities have access to and use of information and data provided by the federal government in a manner comparable to employees and members of the public who lack any such disabilities.<sup>17</sup> This requirement extends to contractors that provide products or services to the federal government.<sup>18</sup> However, there is no concomitant requirement that federal agencies retrofit existing technologies or systems to provide access for individuals with disabilities. Similarly, as

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<sup>14</sup> *Id.* at § 35.150(a)(3).

<sup>15</sup> 42 U.S.C. §§ 2000b *et seq.* In contrast, complaints about the TRS services provided by a private telecommunications carrier may be brought to the Commission or a state PUC. Remedies under the Civil Rights Act are not available.

<sup>16</sup> Further, in August 2000, President Clinton signed an Executive Order to improve access to federal programs for persons who, on the basis of national origin, have limited English proficiency. Executive Order 13166 (August 11, 2000). This Executive Order applies to all programs that receive federal financial assistance. Each agency, including the Federal Communications Commission and the US Department of Transportation, are required to develop agency-specific guidelines for implementing these new requirements.

<sup>17</sup> 29 U.S.C. § 794a. Covered equipment, products, etc., include software applications and operating systems; web-based Intranet and Internet information and applications; telecommunications products; video and multimedia products, self contained, closed products; and desktop and portable computers. Section 508 requires the development of technical standards to enable access to these items by persons with disabilities.

<sup>18</sup> *Id.*

noted above, one set of implementing rules for Section 255 of the Telecommunications Act of 1996 explicitly exempts existing telecommunications equipment from accessibility requirements except where they have undergone a “substantial change or upgrade.”<sup>19</sup> In contrast, public transportation agencies are required by federal statute to modify “remanufactured” buses and train cars for disabled individuals if purchased for continued service.<sup>20</sup> Existing stations and other public transportation facilities must also be modified for the disabled “to the maximum extent possible.”<sup>21</sup> These same requirements apply equally to private providers of public transportation services.

A comparison of these provisions suggest that absent a specific statute, implementing provision or other authoritative statement, there does not appear to be a federal telecommunications requirement that existing traveler information services be retrofitted to provide access for individuals with disabilities. However, at least on a going-forward basis, those implementing the 511 code should include in their design plans how they intend to provide access to these services to the disabled community, such as through the carriers’ existing TRS or TDD capabilities. A failure to provide this access could be judged as violative of the ADA’s non-discrimination rules. 511 traveler information services will be offered by public entities and will also likely be recipients of federal transportation funding. On either basis this access requirement could be invoked. There may also be relevant state laws that impose greater or equal protections to the disabled, which are permitted under the ADA. While there are limits as to the extent and cost of any required accommodations for disabled individuals, all 511 implementation plans should address how such services are to be offered to this segment of the traveling public.

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<sup>19</sup> 36 C.F.R. § 1193.2.

<sup>20</sup> 42 U.S.C. § 12142(c).

<sup>21</sup> *Id.* at § 12147.

## ISSUE 3.4: ENVIRONMENTAL JUSTICE

### A. Issue Definition

This issue refers to the relationship of 511 and environmental justice principals that prevent discrimination against minority and low-income populations.

### B. Recommended Guideline

The Civil Rights Act of 1964 and a 1994 Presidential Executive Order address the Federal government's responsibilities to assure that programs and activities receiving federal financial assistance adhere to environmental justice principals that prevent discrimination against minority and low-income populations. 511 services that use Federal funds must adhere to these rules.

### C. Discussion

#### a. Issue

Environmental Justice is a term used to describe efforts that prevent discrimination against minority and low-income populations. There are three fundamental environmental justice principles:

1. To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority and low-income populations.
2. To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
3. To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

According to the FHWA/FTA jointly maintained environmental justice website (address?), the above three principles are meant to influence transportation decision-making in the following ways:

- Result in better transportation decisions that meet the needs of all people.
- Lead to the design of transportation facilities that fit more harmoniously into communities.
- Enhance the public-involvement processes, strengthen community-based partnerships, and provide minority and low-income populations with opportunities to learn about and improve the quality and usefulness of transportation in their lives.
- Improve data collection, monitoring, and analysis tools that assess the needs of, and analyze the potential impacts on minority and low-income populations.

- Lead to the establishment of partnerships between public and private programs that leverage transportation-agency resources in order to achieve a common vision for communities.
- Avoid disproportionately high and adverse impacts on minority and low-income populations.
- Minimize and/or mitigate unavoidable impacts by identifying concerns early in the planning phase and providing offsetting initiatives and enhancement measures to benefit affected communities and neighborhoods.

Simply put, what the above means is that (as in the US DOT's planning regulations - 23 C.F.R. 450) decision-makers are required to "seek out and consider the needs of those traditionally underserved by existing transportation systems, including, but not limited to, low-income and minority households. In doing so, all reasonably foreseeable adverse social, economic, and environmental effects on minority and low-income populations must be identified and addressed."

#### b. Options considered

From a consistency perspective, there are really only two options to address this issue: (1) allow 511 implementers to carry out public involvement processes related to implementation of 511 without Coalition guidance, trusting that an appropriate review of 511's potential effects on minority and low-income populations takes place. (2) encourage development of guidelines concerning the design of broadly inclusive public-involvement processes oriented toward a review of environmental justice issues – given the manner in which government agencies have focused on this issue over the past few years – and the consequences for projects that have not adequately addressed environmental justice – this is probably the wisest course of action.

#### c. Conclusions

US DOT regulations call for the consideration of environmental justice in all aspects of planning and project decision-making, including the design of the public-involvement plan. If well-designed and initiated early enough in the planning of new transportation projects, environmental justice oriented public involvement processes can forewarn government officials about environmental justice concerns that might have otherwise gone unnoticed, consequently resulting in unpleasant surprises later in the project development process.

Accordingly, the Coalition encourages all implementers to carefully review federal policies and regulations associated with environmental justice, particularly when federal funding will be used to implement, operate or maintain 511 systems.

Broadly stated, activities that could be used as part of a process to address Environmental Justice Issues include:

- **Identify** known stakeholders (a person or group likely to be affected by a decision, whether it is their decision to make or not) and seek out others who may have been overlooked (e.g. talk to local advocacy groups about who should participate, use ads in newspapers, etc.)
- **Facilitate** discussions to explore stakeholder concerns and interests surrounding local implementation of 511 (hold public meetings, talk with representatives of advocacy groups, etc.)
- **Draft a work plan** which provides stakeholders with the opportunity to work with decision-makers to address key issues (the plan should establish ground rules for participants to follow and encourage constructive communication), thereby facilitating the realization of a final agreement;
- **Organize and Convene** public meetings/workshops in accord with the work plan so that participants are provided with the opportunity to pursue an in-depth exploration of the issue and exchange information regarding issues of concern
- **Document** the process' results (could be in many formats – from notes taken at public meetings to dissemination of published reports)

*Note: Although no universally agreed upon methodology has been developed concerning that manner in which processes such as that described above are implemented, research indicates that securing the involvement of a professional neutral trained in facilitation will likely improve the probability of reaching a consensus-based decision.*

#### d. Additional Information

Further information on environmental justice regulations can be found at these sites:

- US DOT Environmental Justice Web-site Homepage -  
<http://wwwcf.fhwa.dot.gov/environment/ej2.htm>
- Title VI – Civil Rights Act of 1964 -  
[http://www.fhwa.dot.gov/environment/title\\_vi.htm](http://www.fhwa.dot.gov/environment/title_vi.htm)
- Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations -  
<http://www.epa.gov/docs/oejpubs/execordr.txt.html>
- US DOT Order on Environmental Justice -  
[http://www.fhwa.dot.gov/environment/ejustice/dot\\_ord.htm](http://www.fhwa.dot.gov/environment/ejustice/dot_ord.htm)
- FHWA Order on Environmental Justice -  
[http://www.fhwa.dot.gov/legsregs/directives/orders/6640\\_23.htm](http://www.fhwa.dot.gov/legsregs/directives/orders/6640_23.htm)

## ISSUE 3.5: STANDARDS

### A. Issue Definition

This issue addresses the application of national ITS standards to 511 implementations.

### B. Recommended Guideline

Significant resources have been invested in the development of ITS standards that will simplify and expedite the deployment of interoperable systems. 511 implementers should review the full range of standards available and consider using those that will aid in cost-effective system development and/or inter-system interoperability.

### C. Discussion

#### a. Issue

Systems such as those envisioned to deliver 511 are prime candidates for the application of standards. This is because there is likely to be substantial computer-to-computer communication between the systems collecting information and the equipment supporting the telephone service. Also, as multiple 511 systems will be deployed, use of common methods for system implementation may provide benefits related to accelerated implementation and/or reduced costs.

However, if implemented improperly, standards can lead to problems. Standards can be too restrictive, sometimes preventing systems from evolving as new technologies emerge. Also, implementers can resist use of poorly crafted or rushed standards. Furthermore, standards also often take significant time to develop. If implementers wait for relevant standards to be completed, it could delay the implementation of 511 services.

Balancing the benefits of standards with their potential drawbacks in order to support a rapid and orderly implementation of 511 systems is the issue addressed by this guideline.

#### b. Options considered

The Coalition has examined three principal approaches to the issue:

- At this time, do not address the standards issue. Allow implementers to decide how best to develop their systems and whether or not to use existing standards, or collectively seek to deploy new standards.
- Initiate development of 511-related standards. Identify useful standards and immediately proceed with their development.

- Encourage the usage of existing ITS standards as appropriate. Direct 511 implementers towards existing or developing ITS standards for consideration in system designs.

c. Conclusions

At present, the Coalition is not prepared to initiate one or more 511-focused standards development efforts. This is primarily due to the fact that it remains unclear what standards will be needed specifically for 511 systems. Further, the ITS program has already invested considerable resources in the development of national standards to facilitate the efficient exchange of information. Implementation of some of these standards, consistent with the national ITS architecture, could be quite beneficial to system implementers by reducing the time and resources required to share information between transportation management systems and 511 support systems.

Existing standards that should be examined include the ATIS and ATMS data dictionaries and several “business area standards” from the Transit Communications Interface Profiles (TCIP) family of standards. An example of how these standards can help is provided by the ATIS Data Dictionary, which includes binary codes for over 1500(?) types of highway event “descriptors”. These codes could be programmed into both the management systems and 511 equipment, so that only binary codes would need to be transferred between systems to provide the information necessary for creating route-segment reports. This also has the benefit of largely standardizing the reports that callers hear, aiding their understanding of reported information. The central focal point for ITS standards information is <http://www.its-standards.net/>.

The Coalition will continue to work with implementers to determine whether modifications to published or developing ITS standards are desirable, and/or new 511-specific standards are needed to support the service implementation and integration.

## ISSUE 3.6: PRIVACY

### A. Issue Definition

This issue addresses the privacy rights of 511 callers.

### B. Recommended Guideline

511 services should adhere to ITS America's Fair Information and Privacy Principles.

### C. Discussion

#### a. Issue

Privacy issues are becoming an increasing concern of the American public and media. With data gathering, warehousing and mining techniques rapidly advancing, citizens are carefully examining new services for possible privacy intrusion. With the convergence of telephony and computer technology, many of the same privacy concerns that are raised by the Internet could become issues with 511 services as well.

For example, a first-time 511 caller could be identified by their phone number, with a record kept of the specific piece of information they desired. Somewhat equivalent to a "cookie" in Internet terms, the next time the caller uses the service, they could be asked if they want the same report they sought during their last call. While possibly a time saver, this could also be viewed as a privacy intrusion.

This example is a typical one when debating privacy issues in general, as cases of potential concern are often associated with balancing consumer convenience and their desire for privacy. As 511 systems advance, privacy implications will certainly arise.

#### b. Options considered

From a national perspective, the following options could be considered in addressing privacy issues:

- Be silent – early implementations of 511 will likely adhere to the "launch model" described in the Content Guidelines. In these cases, caller identity and location will be anonymous. Thus no privacy concerns exist.
- Prohibit types of services that could lead to privacy concerns – all services that could identify callers, their location or usage patterns would be prohibited.
- Establish policies or principles governing the use of personally-identifiable information.



c. Conclusions

The Coalition benefits from years of groundbreaking work that ITS America has conducted in the area of ITS and privacy. In February 2001, ITS America adopted its “Intelligent Transportation Systems Fair Information and Privacy Principles.” These principles offer a complete and well-balanced approach to protecting individual’s privacy while still enabling the development of services and applications that are beneficial to consumers and will attract private sector investment and innovation. 511 systems should strive to adhere to these guidelines from the outset of their planning so that when inevitable privacy issues arise, the foundations for properly addressing them are in place.

d. Additional Information

ITS America’s ITS Fair Information and Privacy Principles are available at: <http://www.itsa.org/resources.nsf/24aebd36f046a5a58525658d00644198/bad372b260280b3385256818004fe7e3?OpenDocument>. The principles have been reproduced on the following pages.

**ITS America's  
Intelligent Transportation Systems  
Fair Information and Privacy Principles**  
*(Approved by ITS America's Board of Directors – February 2001)*

These fair information and privacy principles were prepared in recognition of the importance of upholding individual privacy in implementing Intelligent Transportation Systems (ITS). The principles represent values and are designed to be flexible and durable to accommodate a broad scope of technological, social and cultural change. ITS America may, however, need to revisit them periodically to assure their applicability and effectiveness.

These principles are advisory, intended to educate and guide transportation professionals, policy makers, companies, organizations, and the public as they develop fair information and privacy guidelines for specific intelligent transportation projects. Initiators of ITS projects are urged to publish the fair information and privacy principles that they intend to follow. Parties to ITS are urged to include enforceable provisions for safeguarding privacy in their contracts and agreements.

*1. INDIVIDUAL CENTERED. Intelligent Transportation Systems must recognize and respect the individual's interests in privacy and information use.*

ITS Systems create value for both individuals and society as a whole. Central to the ITS vision is the creation of ITS Systems that will fulfill our national goals. The primacy focus of information use is to improve travelers' safety and security, reduce travel times, enhance individuals' ability to deal with highway disruptions and improve air quality. Travel information is collected from many sources, some from the infrastructure and some from vehicles, while other information may come from the transactions -- such as electronic toll collection -- that involve interaction between the infrastructure and vehicle. That information may have value in both ITS and non-ITS applications. The individual's interest in privacy must be respected. This requires disclosure and the opportunity for individuals to express choice if personal identification is collected.

*2. VISIBLE. Intelligent Transportation Information Systems will be built in a manner "visible" to individuals.*

ITS may create data on individuals. Individuals should have a means of discovering how the data flows operate. "Visible" means to disclose to the public the type of data collected, how it is collected, what its uses are, and how it will be distributed. The concept of visibility is one of central concern to the public, and, consequently, this principle requires assigning responsibility for disclosure.

*3. COMPLY. Intelligent Transportation Systems will comply with applicable state and federal laws governing privacy and information use.*

Privacy law is a patchwork of federal and state statutes, as well as federal and state judicial opinions. The "right" to privacy as a matter of law in the context of transportation on public roads and other facilities is limited. Intelligent Transportation Systems should provide, at a minimum, privacy protections in conformity with the law of respective jurisdictions.

*4. SECURE. Intelligent Transportation Systems will be secure.*

ITS databases may contain information on where travelers go, the routes they use, and when they travel, and therefore must be secure. All ITS information systems will make use of data security technology and audit procedures appropriate to the sensitivity of the information. ITS systems should use technological and administrative safeguards to assure that access to personally identifiable information is restricted to duly authorized individuals.

*5. LAW ENFORCEMENT. Intelligent Transportation Systems have an appropriate role in enhancing travelers' safety and security interests, but absent consent, statutory authority, appropriate legal process, or emergency circumstances as defined by law, information identifying individuals will not be disclosed to law enforcement.*

ITS has the potential to make it possible for traffic management agencies to know where individuals travel, what routes they take, and travel duration. Therefore, ITS can increase the efficiency of traffic law enforcement by providing aggregate information necessary to target resources. States may legislate conditions under which ITS information will be made available to law enforcement agencies. Absent government authority, however, ITS systems should not be used as a surveillance means for enforcing traffic laws, nor used as a tool of criminal investigation. Although individuals are concerned about public safety, persons who voluntarily participate in ITS programs or purchase ITS products should be informed of how information they are providing is used.

*6. RELEVANT. Intelligent Transportation Systems will only collect personal information that is relevant for ITS purposes.*

ITS, respectful of the individual's interest in privacy, will only collect information that contain individual identifiers that are needed for the ITS service functions. Furthermore, ITS information systems will include protocols that call for the purging of individual identifier information that is no longer needed to meet ITS needs.

*7. ANONYMITY. Where practicable, individuals should have the ability to utilize Intelligent Transportation Systems on an anonymous basis.*

Certain ITS applications (commercial vehicle operations or "mayday") require personally identifiable information to function. Others (such as automated fee payment) may be designed to enable use by individuals without identifying themselves (through anonymous debit accounts) or with identifiers for convenience (credit cards). Unless

provision of identifiers is required by the ITS application, users should be provided with the opportunity to choose anonymity.

*8. COMMERCIAL OR OTHER SECONDARY USE. Intelligent Transportation Systems information stripped of personal identifiers may be used for non-ITS applications.*

American consumers want information used to create economic choice and value, but also want their interest in privacy preserved. ITS information is predictive of goods and services that interest consumers, for example, the right location for stores, hospitals and other facilities. However, personally identifiable information collected by ITS surveillance technologies is extremely sensitive. Therefore, the following practices should be followed:

ITS information absent personal identifiers may be used for ITS and other purposes. Generally, data collectors should assure that ITS information provided to private organizations for secondary uses is stripped of personal identifiers. Individuals, however, may contract to allow use of personal identifiers for secondary use if full disclosure in the intended use is made and informed consent obtained.

*9. FOIA. Federal and State Freedom of Information Act (FOIA) obligations require disclosure of information from government maintained databases. Database arrangements should balance the individual's interest in privacy and the public's right to know.*

In determining whether to disclose ITS information, governments should, where possible, balance the individual's right to privacy against the preservation of the basic purpose of the Freedom of Information laws to open agency action to public scrutiny. ITS travelers should be presumed to have reasonable expectations of privacy for personal identifying information. Pursuant to the individual's interest in privacy, the public/private framework of organizations collecting data should be structured to resolve problems of access created by FOIA.

*10. OVERSIGHT. Jurisdictions and companies deploying and operating Intelligent Transportation Systems should have an oversight mechanism to ensure that such deployment and operation complies with their Fair Information and Privacy Principles.*

Governments and companies should implement proper procedures to ensure that they protect the individual user's right to privacy, at a minimum, to the extent outlined in these principles. This mechanism may include internal directives, the appointment of a privacy officer, and/or penalties for violations. Governments and companies should have the flexibility to tailor such a system to their respective needs or circumstances.

## ISSUE 4.1: 511 BRANDING

### A. Issue Definition

This issue refers to the creation of a brand identity for 511 services to manage consumer expectations.

### B. Recommended Guideline

The 511 designation is a brand like “Intel inside.” Local implementations of 511 should incorporate whatever collateral (greeting, logos, signage, etc.) the national effort develops in conjunction with the local ATIS brand that is being marketed. 511 callers must realize that the local 511 implementation is part of a national program with certain requirements for quality and content.

### C. Discussion

#### a. Issue

511 is a precious N11 resource entrusted to state and local government transportation agencies. The 511 service will be national in scope, but implementations will be local in nature. Local implementers may want to use materials developed for a national 511 brand in addition to their local materials. Consumers would then recognize that this 511 implementation would have similar content and consistency with the national 511 identity.

#### b. Options considered

From a consistency perspective, there are really only two options to address this issue: (1) provide national 511 branding materials to the local agency for use if they adhere to the content and consistency guidelines or (2) do not provide national 511 branding materials.

#### c. Conclusions

The Working Group strongly supports the provision of national 511 branding materials to the local agency for use if they adhere to the content and consistency guidelines. The potential for problems with a laissez faire approach are many, including the potential for 511 service fragmentation and service confusion if 511 is used for different purposes in different regions.

## ISSUE 5.1: NUMBER ALLOCATION AND SERVICE COORDINATION

### A. Issue Definition

This issue refers to organizing and coordinating transportation agencies in a given region to determine what 511 services will be offered, by whom and in what geographic area(s).

### B. Recommended Guideline

State Departments of Transportation should accept the lead facilitating role for planning how 511 services will evolve in their state. In this role, state DOTs should work closely and in partnership with other transportation operators in their state. State DOTs should also lead coordination efforts with the state's public utilities or service commission. In regions where multi-state cooperation is logical, state DOTs should coordinate with one another so that service regions make sense to callers.

### C. Discussion

#### a. Issue

The Federal Communications Commission (FCC) ruling assigning 511 for traveler information states that "governmental entities" are the only parties that can request to utilize 511. Further, the FCC leaves to "federal, state and local government transportation agencies the discretion to determine the deployment schedule and type of transportation information that will be provided using 511." While it was desirable for the FCC to leave these decisions to transportation agencies, it also presents a challenge to agencies to ensure that maximum use of 511 can be obtained. To do so, agencies at all levels must be closely coordinated and isolated applications of 511 by local agencies for a single purpose must be avoided in general.

To provide an example of the potential for mischief, the following is a list of the types of agencies that could, under the FCC order, legitimately request and establish 511 service:

- U.S. Department of Transportation and its agencies (*note: U.S. DOT is not getting involved in service provision – the point though is they could according to the FCC ruling*).
- State Department of Transportation
- Toll Authorities
- County governments
- City governments
- Transit agencies
- Metropolitan planning organizations
- Airport authorities
- Cruise port authorities
- Ferry operators
- Commuter rail agencies
- Amtrak?

All agencies on this illustrative list could provide a 511 service in any geographic area of their choosing, with the only requirement that they request the service from a telecommunications carrier first.

b. Options considered

From a consistency perspective, there are really only two options to address this issue: (1) let agency coordination occur naturally and trust that appropriate coordination will occur to prevent underutilization of 511 or (2) encourage active coordination and recommend a logical organization to conduct this coordination.

c. Conclusions

The Coalition strongly supports the need for active coordination. The potential for problems with a laissez faire approach are many, including the potential for 511 service fragmentation and service confusion if 511 is used for different purposes in different regions.

The Coalition believes that state DOTs are in the best position to facilitate 511 service planning for many reasons, including:

- As a state agency, state DOTs are a “sister agency” to the state telecommunications regulatory authority (which go by different names, but are often called public service commissions, public utilities commissions or corporate commissions) that will monitor and ensure landline carriers compliance with the FCC ruling.
- State DOTs have experience in coordinating and cooperating with many agencies in their state – or with neighboring states – to deliver transportation services.
- Early examples of successful telephone services have strong leadership from state DOTs.
- State DOTs generally have more staff and funding resources to conduct proper coordination and planning than other agencies.

The Coalition also recognizes that examples exist where state DOTs have not conducted proper coordination with other agencies in the state and with neighboring states. State DOTs are encouraged to facilitate and coordinate service planning, but not to “bully” other agencies in the process of developing 511 plans. Further, State DOTs must establish organizational commitment to 511 and continued service coordination, so that quality services will be sustained. ITS America state chapters may offer an ideal venue to conduct agency coordination on 511.

d. Additional Information

Attached are a few documents describing examples of state DOTs accepting and being assigned the role of 511 service facilitator as described in this guidance paper.

First, attached is a ruling of the Kentucky Public Service Commission assigning 511 to the Kentucky Transportation Cabinet (the State DOT). The second attachment is House Bill 202, enacted into law in Utah in 2001 that established Utah DOT as the lead agency in the state for 511 services. In both of these examples, the state, while getting statutory or regulatory authority also is committed to working with other agencies.

The third attachment is a letter submitted by the California Department of Transportation to the California Public Utilities Commission which describes the efforts of California DOT to coordinate and facilitate 511 service development with many agencies. This is an example where a state agency is fulfilling the recommended role without explicit legislative or regulatory direction.



COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

INVESTIGATION INTO THE ASSIGNMENT	)	ADMINISTRATIVE
OF ABBREVIATED N11 DIALING CODES	)	CASE NO. 343

ORDER

On November 5, 1993, after investigation, the Commission determined that the allocation of N11 dialing codes was not in the best interests of Kentucky telephone users or information service providers. The Commission found that N11 was a scarce public resource that should not be allocated to private enterprises but should be used for the delivery of critical services to the public. Moreover, the Commission determined that its mandate should not be construed as authorization for local exchange carriers to offer N11 dialing codes as a tariffed service.

Pursuant to an April 13, 1995 request by the Kentucky Transportation Cabinet ("Transportation Cabinet"), the Commission found that the intended use by the Transportation Cabinet of a 3-digit dialing code for traffic routing in the northern Kentucky area was in the best interest of Kentucky. The Commission found that the Transportation Cabinet's use of the 3-digit dialing code should be strictly limited to its public service project, and approved that project for a period of two years on June 21, 1995.

The Commission originally allocated 311 for the use of the Transportation Cabinet's project; however, on November 14, 1997, the Commission changed the dialing code to 211 because the Federal Communications Commission ("FCC") had allocated 311 on a nationwide basis for non-emergency police calls.

On October 29, 1999, the Commission extended the assignment of the 211 dialing code to the Transportation Cabinet for a period of six months past the FCC's decision in its proceeding regarding allocation of N11 codes.

On August 30, 2000, the Transportation Cabinet filed a petition requesting permanent assignment of the 511 dialing code for statewide traffic routing information. The FCC's decision assigning the 511 dialing code for traveler information and providing transportation agencies discretion in its implementation had been released on July 31, 2000. 1 The FCC allocated 211, currently used by the Transportation Cabinet, for social service agencies. According to the FCC order, state transportation agencies have the discretion to determine the deployment schedule of 511, determine the type of transportation information to be provided using the three-digit number, and ensure that state and local transportation agencies cooperate in their implementation of 511. In addition, the agencies are to provide appropriate transportation information and ensure

that such information covers more than municipal boundaries and is retrievable by a single telephone call.

According to the Transportation Cabinet, it is the only agency in the Commonwealth of Kentucky that can fulfill all of these mandates. The Transportation Cabinet indicates in its petition that it will work with other agencies such as the Lexington-Fayette Urban County Government and nine other entities that currently provide traveler information in Kentucky.

The Commission has reviewed the Transportation Cabinet's petition and concurs with its contentions. Accordingly, the Commission finds that the 511 dialing code should be assigned to the Transportation Cabinet on a permanent, statewide basis. The Transportation Cabinet is urged to convert its use of 211 to 511 as expeditiously as possible.

BE IT SO ORDERED.

Done at Frankfort, Kentucky, this 30th day of October, 2000.

By the Commission

# **511 COMMUNICATIONS SYSTEM**

2001 GENERAL SESSION

STATE OF UTAH

**Sponsor: Marda Dillree**

**This act modifies the Transportation Code to provide for the implementation of "511" traveler information services by the Department of Transportation. The act provides for rulemaking and for agreements to share the cost of the service.**

This act affects sections of Utah Code Annotated 1953 as follows:

ENACTS:

**72-6-119**, Utah Code Annotated 1953

*Be it enacted by the Legislature of the state of Utah:*

Section 1. Section **72-6-119** is enacted to read:

**72-6-119. "511" Traveler information services -- Lead agency --**

**Implementation --**

**Cooperation -- Rulemaking -- Costs.**

(1) As used in this section, "511" or "511 service" means three-digit telecommunications dialing to access intelligent transportation system -- traveler information service provided in the state in accordance with the Federal Communications Commission and United States Department of Transportation.

(2) The department is the state's lead agency for implementing 511 service and is the state's point of contact for coordinating 511 service with telecommunications service providers.

(3) The department shall:

(a) implement and administer 511 service in the state;

(b) coordinate with the highway authorities and public transit districts to provide advanced multimodal traveler information through 511 service and other means; and

(c) in accordance with Title 63, Chapter 46a, Utah Administrative Rulemaking Act, make rules as necessary to implement this section.

(4) (a) In accordance with Title 11, Chapter 13, Interlocal Cooperation Act, the department shall enter into agreements or contracts with highway authorities and public transit districts to share the costs of implementing and administering 511 service in the state.

(b) The department shall enter into other agreements or contracts relating to the 511 service to offset the costs of implementing and administering 511 service in the state.

December 27, 2000

Ms. Cheri Conner  
California Public Utilities Commission  
Telecommunications Division  
505 Van Ness Avenue  
San Francisco, CA 94102-3298

Dear Ms. Conner:

Last August 15, 2000, we met regarding the Federal Communications Commission order reserving 511 for advanced traveler information systems (ATIS). We came away from the meeting with the understanding that the California Public Utilities Commission (CPUC) planned a limited role in assigning the 511 telephone number to regional transportation service providers and in setting tariffs to assist regional transportation organizations implementing 511.

Pursuant to the August meeting, the California Department of Transportation (Caltrans) sponsored a Statewide 511 Workshop in Oakland on October 18, 2000 and a second workshop in Los Angeles on November 14, 2000. These workshops had two purposes. First, they established which regional agencies' ATIS may be able to convert their telephone access to 511 in the near term. These regional transportation agencies are, by State law, the primary responsible organizations for managing traffic congestion. They use traveler information as the premier strategy for informing people of auto, bus, train, ferry, bicycle and ridesharing conditions/options, and are investing heavily in developing and ATIS. Second, the workshops introduced the local and regional agencies to the State's master telecommunications contractors who can assist the telephone system design and development aspects for the regions.

The earliest deployment of 511 within California will be by the Metropolitan Transportation Commission (MTC) in the nine county San Francisco Bay Area. The counties include Marin, Sonoma, Napa, Solano, Contra Costa, Alameda, Santa Clara, San Mateo, and San Francisco. The region encompasses telephone Area Codes 408, 415, 510, 925, and portions of 707. MTC has recently entered into a \$38 million contract to revise and update their TravInfo® multi-modal ATIS, and is currently redesigning the TravInfo® telephone advisory system. They should be ready to make a transition from their current telephone system by Spring 2002; although there is a possibility for transition as early as Fall 2001, depending primarily on the availability of the 511 service from telecommunications providers.

San Diego County may be the next deployment to follow MTC. The highway, bus transit, train, highway and ridesharing providers in San Diego currently partner with Caltrans for operating 1-800-COMMUTE telephone access. The 1-800-COMMUTE provided travelers with a menu to select their transportation choice, pending the partners' ability to meld their schedules and add real-time data into an ATIS. Towards that goal,

the San Diego Association of Governments (SanDAG) is in the process of awarding a major contract (\$6 million) for the development and deployment of an ATIS.

Free public telephone access to real time traveler information is likely to be operational sometime in 2001 although use of 511 is uncertain pending contract negotiations. Therefore we recommend SanDAG as the responsible transportation agency for 511 assignment in San Diego County, encompassing Area Codes 619, 858, 935, and the San Diego County portion of 760.

Assignment of 511 in America's largest consumer market, the greater Los Angeles area, is unclear with three different tracks possible. It may take until 2003 before the many governments in the region come to consensus on which path to follow.

On the first track, the key decision-makers are the regional transportation agencies with the funding authority and congestion management responsibility. Many of these agencies are making major investments in multi-agency, multi-modal, ATIS. These include the Ventura County Transportation Commission, Los Angeles County Metropolitan Transportation Authority (LAC MTA), Orange County Transportation Authority, San Bernardino Association of Governments and Riverside County Transportation Commission. Some of these ATIS are already deployed (e.g., GoVentura) or very near deployment (e.g., OC TravelTIP) and could convert their current telephone access to 511 in a matter of months. Other efforts are in the functionality/user requirements design stage where 511 could be integrated as part of their initial public-access deployments. (Note: Currently the LAC MTA-led ATIS only focuses on 'wholesale' information feeds to commercial information service providers such as media, internet, and pager companies, and does not plan consumer-level retail information distribution.)

A second track for possible 511 deployment/coordination could be lead by the Southern California Priority Corridor SCPC) Committee. The SCPC Committee was created in federal legislation in the early 1990s to coordinate the deployment of Intelligent Transportation Systems (ITS) in the region from Ventura County in the north to Mexico in the south, and from the Pacific Ocean to Arizona. The SCPC Committee is the primary, but not only, funding mechanism for the county-level ATIS projects. It also includes a "Corridor-Wide" project for melding each county's multi-modal advanced traveler information to ensure that travelers crossing county lines can get complete trip information, and a "Corridor-Wide" truck driver information project tailoring traveler information to the needs of the trucking industry. Although neither of these projects currently provide for direct consumer access, they are at the very early scoping stages and the agencies involved could expand them to be the consumer-retail ATIS, including both telephone/511, and internet access.

A third track for the greater Southern California region, including the above counties and Imperial County, would be lead by their common transportation regional planning agency, the Southern California Association of Governments (SCAG). SCAG, in addition to its planning role, operates the Southern California Rideshare (SCR) Agency. SCR provides rideshare matching services throughout the six counties and has been a

leader in promoting 1-800-COMMUTE for multi-modal traveler information. In addition, it has created consumer transit routing/scheduling software and deployed it through the internet.

In its regional planning role SCAG wants to conduct a major planning study of 511 technologies, consumer content preferences, public agencies' ability to provide content, and technologies for fusing information from multiple transportation service providers. This could take a couple of years and would most likely want to utilize the experiences of MTC and SanDAG.

Also attending the 511 workshops were representatives from the Sacramento Area Council of Governments (SACOG) and Santa Cruz County. Caltrans staff interested in traveler information in rural areas of California. SACOG, in partnership with Caltrans, uses 1-800-COMMUTE for consumers to reach transit, train, ridesharing and highway information providers. SACOG and other more rural areas are still developing ITS deployment plans and have not started ATIS projects for real-time multi-modal data collection/fusion/distribution. These more rural regions are described geographically as the North Coast, inland Northern California, the San Joaquin Valley, or the Central Coast. At this time we do not believe these areas can anticipate when they will be ready to deploy 511. It is possible that within the next two years SACOG and others will be ready to begin ATIS projects and could reach consumer-retail deployment including 511 within the five (5) year period set by the Federal Communications Commission.

I hope this letter brings the CPUC up to date on the status of 511 deployment in California.

Please let me know if this telephone number assignment process meets the CPUC needs, and what steps you may need to ensure these agencies have fair and legitimate rights to the 511 number in their regions.

Sincerely,

DAVID LIVELY, Chief  
Traveler Information Systems Branch

## ISSUE 5.2: INTER-REGIONAL INTEROPERABILITY

### A. Issue Definition

This issue addresses the linkage of adjacent 511 systems and ultimately linkage of all 511 systems.

### B. Recommended Guideline

No guideline established at this time.

### C. Discussion

#### a. Issue

One often asked question is “can a caller in one region get information on another, one not served directly by the 511 system called?”

The position of the Coalition on this question is essentially, “yes...at some point in the future.” However, the main focus of the Coalition is to support the establishment of systems that provide at least the basic content for their service area while adhering the consistency guidelines.

With the exception of the linkage of closely inter-related, geographically adjacent systems addressed in Issue 5.1, Number Allocation and Service Planning, the linkage of systems is an issue for the future.

Thus, while it will continue to investigate this issue, the Coalition has chosen not to establish guidelines in this area as of yet.

#### b. Options considered

Although limited consideration has been given to this issue, some possible options for achieving inter-regional interoperability include:

- Transfer calls between 511 systems
- Transfer data between 511 systems
- Fee-based service that transfer calls and/or data between multiple 511 systems

#### c. Conclusions

Not applicable.